

WhistleWare 3.2 and Port Mapping

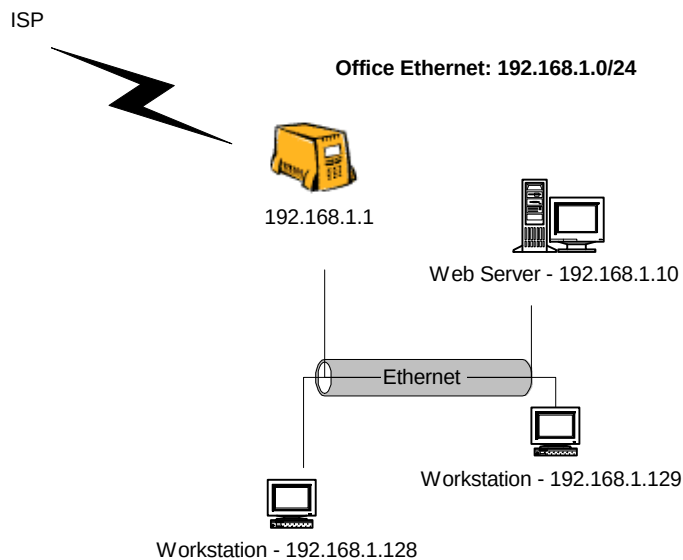
Overview: You may have a machine on your LAN from which you would like to provide a service to the outside. For example, you may have a Web Server, an FTP server or even a database that you would like to make available to the outside world.

Port Mapping allows the configuration of the firewall to support service redirection. This allows you to configure the InterJet to forward requests for a service (HTTP, FTP, SMTP, PPTP etc) to an internal machine. While still being able to provide an external service to the outside however, this internal machine is still protected by the InterJet's firewall in all other respects.

Whistle Communications does suggest that only people experienced with the configuration of firewalls have access to the Port Mapping feature. An incorrect configuration may create a security risk to your files or prevent InterJet services from functioning properly.

How to use the Port Mapping feature.

In the following example one of the machines on our Office Ethernet is a Web Server. We have just developed our web site and have put it on this machine. We now would like to make the web service of this machine available to the outside world.



Configuration Details:

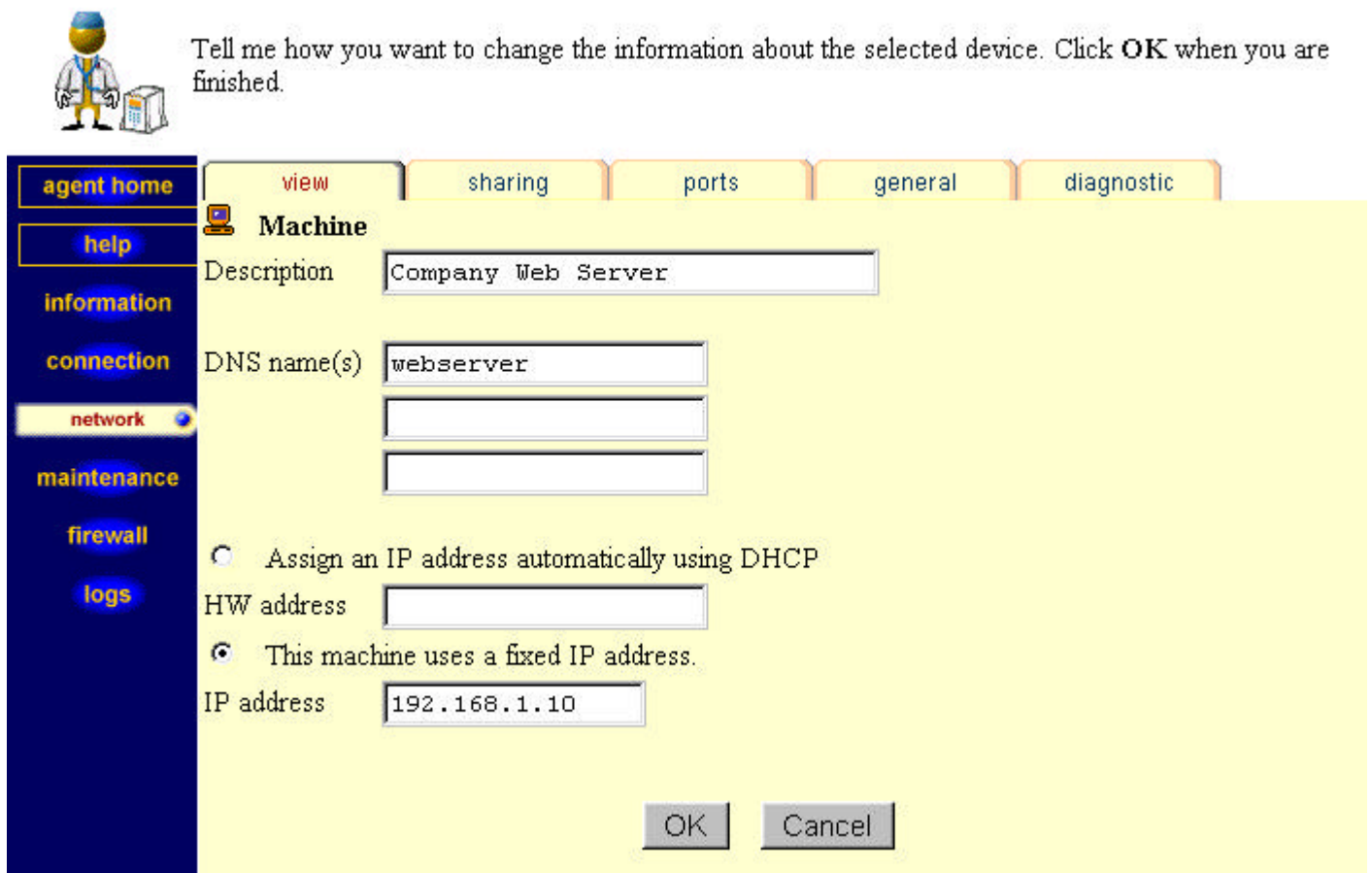
1. Configuring your client to use a static IP address

Overview: Before you can configure the Port Mapping feature on the InterJet, you must first configure the machine (in this case the Web Server) to use a static IP address.

- 1.1 Configure your client to use a static IP address. Consult documentation provided with your client operating system on how to do this.
- 1.2 Accessing the InterJet's User Interface through your browser, go the System Agent / Network page and check the radio button next to the IP address of the web server assigned in step 1.1, then click the 'Edit' button.

- 1.3 Enter a description for this machine, then a DNS name. In this case, we will use “Company Web Server” as the description, and ‘webserver’ for its DNS name.
- 1.4 Check the ‘This machine uses a fixed IP address’ box and enter the IP address of this machine.
- 1.5 Click OK

Figure 1: Screen Shot to configure machine to use static IP



The screenshot shows the 'Machine' configuration window in the InterJet interface. At the top, a message says: 'Tell me how you want to change the information about the selected device. Click OK when you are finished.' Below this is a navigation bar with tabs: 'view' (selected), 'sharing', 'ports', 'general', and 'diagnostic'. On the left is a sidebar with menu items: 'agent home', 'help', 'information', 'connection', 'network' (highlighted with a blue arrow), 'maintenance', 'firewall', and 'logs'. The main area is titled 'Machine' and contains the following fields and options:

- Description:** A text box containing 'Company Web Server'.
- DNS name(s):** A text box containing 'webserver', followed by two empty text boxes.
- IP Configuration:** Two radio buttons. The first is 'Assign an IP address automatically using DHCP' (unselected). The second is 'This machine uses a fixed IP address.' (selected).
- HW address:** An empty text box.
- IP address:** A text box containing '192.168.1.10'.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

2. Configuring Port Mapping on the InterJet

- 2.1 Accessing the InterJet's User Interface through your browser, go the System Agent / Firewall tab.
- 2.2 We first must specify the protocol that will be used. For web services, we must specify the protocol TCP. Select the TCP/UDP selection.
- 2.3 Next we must specify the port that is associated with the service we are mapping. For http, we must specify the port number 80 . (*See below for a list of well known port numbers)
- 2.4 Next we must specify from what IP addresses we will allow access to this internal web server. In this case, we will make the web server available to all external people. Select all.
- 2.5 Finally we must specify the machine on the LAN that will provide the service. From the dropdown menu, select the machine specified by its DNS name configured in step 1.3.
- 2.6 At this point, when a computer on the Internet makes a http request to the InterJet, the InterJet will forward the request to the internal web server at 192.168.1.10.

Figure 2: Screen shot of Port Mapping configuration.

[agent home](#)
[help](#)
[information](#)
[connection](#)
[network](#)
[maintenance](#)
[firewall](#)
[logs](#)

Firewall Configuration

Warning: This page allows you to open holes in the InterJet firewall so that traffic from external machines can reach specified machines on your internal network. An incorrect configuration may create a security risk to your files or prevent InterJet services from functioning properly.

Use this page only if you are experienced in configuring firewalls.

Number	Allow protocol	On port(s) (TCP/UDP only)	For the external machines	To access the internal machine
1	TCP/UDP	80	☐ IP address range: 0.0.0.0 to 0.0.0.0 ☐ Perimeter network ☒ All	webserver

3. Well known TCP port numbers.

20 FTP - Data
 21 FTP - Control
 23- Telnet
 25 – SMTP
 53 – DNS
 80 – HTTP
 110 – POP3